

**The retailer is deploying handheld RFID interrogators and considering wearable interrogators, and is close to adopting forklift readers.**

By Mark Roberti

Jan. 25, 2006—Simon Langford, director of RFID strategy at [Wal-Mart Stores](#), said the retailer is rolling out handheld RFID interrogators to help store associates pick products that need to be brought out to the sales floor. He also said the chain was close to deploying its first forklift interrogator and is in the early stages of looking at wearable readers.

"In 2002, we were involved in the early implementation of RFID readers as part of the Auto-ID Center field trial," Langford told attendees of the [RFID Academic Convocation](#), an invitation-only event held Jan. 23-24 at the [Massachusetts Institute of Technology](#) (MIT). "Those early readers took hours to install and minutes to destroy. But we learned a lot, and we have been applying that knowledge."



*Simon Langford*

Langford said Wal-Mart can now deploy interrogators at 20 read points in a store or distribution center within hours. A few years ago, it would have taken several days to complete the same installation. One reason for the quicker completion time is that vendors have introduced hardened portal systems that can be bolted to the floor, as opposed to requiring end users to install supports for interrogator antennas.

Wal-Mart is also rolling out handheld RFID interrogators—mobile computers that can scan a bar code or read an RFID tag. Store associates use these devices to identify which items are out of stock and generate lists of products to be brought out from the back of the store. The devices beep more loudly as they approach an RFID tag, enabling associates to find cases in the back room quickly.

Additionally, Wal-Mart is close to deploying a forklift reader that could reduce the need to install portal interrogators around dock doors at its [Sam's Club](#) stores and, eventually, its distribution centers. The forklift interrogators read tags on pallets the forklift is carrying. The interrogators could also read shelf tags or location tags embedded in the floor of the store or DC. This will enable Wal-Mart to streamline business processes by enabling the retailer to track where a pallet has been placed.

Langford said Wal-Mart is in the early stages of investigating the use of wearable RFID solutions. These might include interrogators attached to associates' belts or vests. "The system could be reading tags in the background and giving the associates information on what they need to do," he said. "We need systems to help people move product to the shelf. It's the last 50 yards [where products are brought to the store shelves] that's the hardest."

Wal-Mart is currently upgrading its RFID systems to the second-generation Electronic Product Code

standard—which, Langford said, would bring performance improvements. "When we said we needed an EPC standard that would work globally, we didn't need a global tag that offered a small improvement in performance. We needed a step change," he says. "I'm pleased to say Gen 2 is a step change in performance."